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**USING LINKED CENSUS R&D-LRD DATA
TO ANALYZE THE EFFECT OF R&D INVESTMENT
ON TOTAL FACTOR PRODUCTIVITY GROWTH**

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Abstract

Previous studies have demonstrated that productivity growth is positively correlated with the intensity of R&D investment. However, existing studies of this relationship at the micro (firm or line of business) level have been subject to some important limitations. The most serious of these has been an inability to adequately control for the diversified activities of corporations. This study makes use of linked Census R&D-LRD data, which provides comprehensive information on each firms' operations at the 4-digit SIC level. A marked improvement in explaining the association between R&D and TFP occurs when we make appropriate use of the data by firm by industry. Significant relationships between the intensities of investment in total, basic, and company-funded R&D, and TFP growth are confirmed.

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FIGURE 1

COMPARING OUT ESTIMATES OF CHANGE IN TFP WITH THOSE OF KENDRICK
PLOT OF $\Delta YDIFP \div KENIFP$

